UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,458	10/29/2003	William E. Slack	PO-7963/MD-02-111	6016

157 7590 01/24/2007

BAYER MATERIAL SCIENCE LLC
100 BAYER ROAD
PITTSBURGH, PA 15205

EXAMINER	
SERGENT, RABON A	
ART UNIT	PAPER NUMBER
1711	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/696,458	SLACK ET AL.	
	Examiner	Art Unit	
	Rabon Sergent	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *6-10 and 19* is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-5 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11-22 of U.S. Patent No. 6,515,125 in view of Oertel (page 90).

The claims of U.S Patent 6,515,125 are drawn to storage stable prepolymers containing a mixed trimer of toluene diisocyanate and a polyisocyanate of the diphenylmethane series, wherein the prepolymer contains a NCO group content that meets applicants' claimed NCO group content and is produced from isocyanate reactants and hydroxy-functional reactants that meet those of applicants. The claims of U.S. Patent 6,515,125 differ from the claims of the instant application in that the claims of the patent fail to recite the presence of allophanate groups; however, the position is taken that the patent's claims encompass products that contain allophanate groups and processes wherein allophanate products are produced, because the process of the claims yielding the aforementioned products encompasses reaction conditions that yield allophanate groups. The specification of the patent clearly recites at column 8, lines 23 and 24 that the temperature at which the hydroxy-functional reactant is reacted may be 120°C, and it is noted that Oertel clearly teaches that allophanates may be produced in the absence of a catalyst at temperatures of about 120°C.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Slack et al. ('125), in view of Oertel (page 90).

Slack et al. disclose storage stable prepolymers containing a mixed trimer of toluene diisocyanate and a polyisocyanate of the diphenylmethane series, wherein the prepolymer contains a NCO group content that meets applicants' claimed NCO group content and is produced from isocyanate reactants and hydroxy-functional reactants that meet those of applicants. Slack et al. fail to recite the presence of allophanate groups; however, the position is taken that Slack et al. encompass products that contain allophanate groups and processes wherein allophanate products are produced, because the process yielding the aforementioned products encompasses reaction conditions that yield allophanate groups. The specification of the patent clearly recites at column 8, lines 23 and 24 that the temperature at which the hydroxy-functional reactant is reacted may be 120°C, and it is noted that Oertel clearly teaches that allophanates may be produced in the absence of a catalyst at temperatures of about 120°C. Therefore, the position is taken that the process of Slack et al., even in the absence of a catalyst, operates under temperature conditions wherein the resulting products inherently contain allophanate groups.

5. Alternatively, even if not rising to the level of anticipation, the position is taken that it would have been obvious to incorporate allophanate groups for their art recognized functions and advantages into Slack et al. simply by operating at the upper end of the aforementioned disclosed temperature range, in view of the aforementioned disclosure within Oertel.

6. The examiner has considered applicants' arguments. As a result, the obviousness-type double patenting rejection and the prior art rejection have been withdrawn with respect to the process claims, in view of applicants' argument that Slack et al. does not teach trimerization in the presence of a hydroxyl-group containing compound. However, the rejections have been maintained with respect to the product claims; it is by no means clear that applicants' product claims are distinguished from Slack et al.'s reaction product of the partially trimerized polyisocyanates and the hydroxyl-group containing compound, because Slack et al.'s reaction product can be fairly viewed as "the partial trimerization ... product" (language of applicants' claim 1) of components (I)(A), (I)(B), and (II) (corresponding to applicants' components (A), (B), and (C)). It is not seen that there is any substantial requirement within applicants' claims that definitively require the trimerization to occur in the presence of the hydroxyl-group containing compound, because the claim has not been drafted as a product by process claim. Furthermore, even if the claims were drafted as a product by process claims, applicants have not established that the aforementioned respective products are patentably distinct. It is noted that applicants' claimed NCO content and the NCO content of the aforementioned Slack et al. reaction product overlap.

7. The examiner's position concerning the catalyst issue has been taken in view of the teachings within Slack et al. and applicants' arguments within page 12 of the response of May 8, 2006.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

RABON SERGENT
PRIMARY EXAMINER

R. Sergent
January 20, 2007